CLAIMS

What is claimed is:

1.   A method for data transfer comprising the steps of:
5   detecting the initiation of a primary service function being performed on
an entity in a known location;
           responsive to said detection, establishing a communications link with said
entity;
           managing a transfer of data via said communications link; and
10   terminating said data transfer when at least one condition has been met.

2.   The method of Claim 1, wherein said condition is the completion of said
primary service function.

15   3.   The method of Claim 1, wherein said condition is the completion of the
transfer of a predetermined amount of data.

4.   The method of Claim 1, wherein said communications link is established
via an electrical connection.
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5.   The method of Claim 1, wherein said communications link is established
via a wireless Local Area Network connection.

6.   The method of Claim 1, wherein said communications link is established
25   via electrical field coupling.

7.   The method of Claim 1, wherein said communications link is established
via optical coupling.

8.   The method of Claim 1 further comprising the step of determining the identity of the entity being serviced.

9.   The method of Claim 1 further comprising the step of determining a first amount of data to be transferred.

10.   The method of Claim 9 further comprising causing the transfer of said first amount of data to be completed prior to the termination of said primary service function.

11.   The method of Claim 10, wherein causing the transfer of said first amount of data to be completed prior to the termination of said primary service function includes causing an operator of the primary service function to continue the primary service function until the transfer of said first amount of data is completed.

12.   The method of Claim 11 further comprising the step of notifying the operator of the primary service function of the progress of the transfer of said first amount of data to cause said operator to continue the primary service function until the transfer of said first amount of data is completed.

13.   The method of Claim 9, wherein said first amount of data is determined as a function of an estimation of the duration of the primary service function.

14.   The method of Claim 1, wherein said primary service function is refueling.

15.   The method of Claim 1, wherein said entity is a vehicle.

16.   A method for data transfer comprising the steps of:

detecting the initiation of a refueling function being performed on an entity in a known location;

determining the identity of the entity being serviced;

responsive to said detection, establishing a communications link with said identified entity;

managing a transfer of data via said communications link; and

terminating said data transfer when at least one condition has been met.

17.   A device for enabling a communications link to be established with an entity while it is being refueled, said device comprising:

a first communications element coupled to a fueling system; and

a second communications element coupled to said entity, wherein a communications link is established with said entity when said first and second communications elements are operatively aligned.

18.   The device of Claim 17, wherein said first communications element is coupled to a fueling nozzle and said second communications element is coupled to a fuel receptacle.

19.   The device of Claim 17, wherein said first communications element comprises at least one electrical lead and second communications element comprises at least one electrical surface.

20.   The device of Claim 17, wherein said first communications element comprises at least one electrical surface and second communications element comprises at least one electrical lead.

21.   The device of Claim 17, wherein said first and second communications elements are each an optical device.

22.   The device of Claim 17, wherein said first and second communications elements are each a wireless device.

5   23.   The device of Claim 17, wherein said first and second communications elements each comprise a wireless Local Area Network device.

24.   A system for enabling the transfer of data between an entity and at least one data repository while a primary service function is being performed on said
10   entity, said system comprising:

a communications network element connected to an infrastructure comprising at least one data repository,

a data communications controller coupled to said communications network element and a primary service function system for detecting the initiation of a
15   primary service function and managing a transfer of data between an entity and said at least one data repository;

a first communications element coupled to said data communications controller and to said primary service function system; and

a second communications element coupled to said entity and operatively
20   aligned with said first communications element for establishing a communications link for enabling said data transfer.

25.   The system of Claim 24, wherein said data communications controller is connected to said infrastructure.

26.   A system for enabling the transfer of data between an entity and at least one data repository while a primary service function is being performed on said entity, said system comprising:

        a communications network element connected to an infrastructure
5   comprising at least one data repository,

        a data communications controller coupled to said entity for detecting the initiation of a primary service function and managing a transfer of data between said entity and said at least one data repository;

        a first communications element coupled to said primary service function
10   system and said communications network element; and

        a second communications element coupled to said entity and to said data communications controller and operatively aligned with said first communications element for establishing a communications link for enabling said data transfer.

15   27.   A system for enabling the transfer of data between an entity and at least one data repository while a primary service function is being performed on said entity, said system comprising:

        a communications network element coupled to an infrastructure comprising at least one data repository,

20   a data communications controller coupled to said communications network element and to a primary service function system for detecting the initiation of a primary service function and managing a transfer of data between an entity and said at least one data repository; and

        a wireless Local Area Network device coupled to said data
25   communications controller for establishing a communications link for enabling said data transfer.

28. The system of Claim 27 further comprising a first communications element coupled to said primary service function system and said data communications controller for indicating to said data communications controller that said primary service function has started.

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29. The system of Claim 28 further comprising a second communications element coupled to said entity and operatively aligned with said first communications element for providing information identifying said entity.

10 30. A system for enabling the transfer of data between an entity and at least one data repository while a primary service function is being performed on said entity, said system comprising:

a communications network element coupled to an infrastructure comprising at least one data repository,

15 a data communications controller coupled to an entity for detecting the initiation of a primary service function and managing a transfer of data between an entity and said at least one data repository; and

a wireless Local Area Network device coupled to said communications network element for establishing a communications link for enabling said data

20 transfer.